

Mineral Industry Surveys

For information, contact:

Lisa A. Corathers, Manganese Commodity Specialist U.S. Geological Survey 989 National Center Reston, VA 20192

Telephone: (703) 648-4973, Fax: (703) 648-7757

E-mail: lcorathers@usgs.gov

Nicholas A. Muniz (Data) Telephone: (703) 648-7980 Fax: (703) 648-7975 E-mail: nmuniz@usgs.gov

Internet: http://minerals.usgs.gov/minerals

MANGANESE IN NOVEMBER 2005

On a preliminary, gross-weight basis, reported consumption of manganese ore containing 35% or more manganese, exclusive of that consumed at iron and steel plants, was 31,800 metric tons (t) in November 2005, about the same as the revised figure of 31,610 t in October 2005, according to the U.S. Geological Survey. This figure increases to 34,200 t when estimates for annual respondents are added on the basis of 2004 data. Corresponding industry stocks of ore at the end of the month were 303,000 t, which include an estimate for annual respondents on the basis of 2004 data. This was about a 7% decrease from the revised estimate of stocks at the end of October (324,000 t).

Foreign trade data for November will appear in a subsequent report. The following comparisons of trade data were made on the basis of manganese content. The data for October 2005 tabulated in this report indicate that the total exports of 1,800 t were 22% higher than those of the prior month, owing to increases in exports of ferromanganese and silicomanganese. Manganese imports were 81,200 t, which was an increase of 10% compared with those of September. The increase in manganese imports was primarily attributable to increases in silicomanganese and manganese metal imports.

Ferroalloy Prices, manganese content

	High-carbon ferromanganese ¹	Medium-carbon ferromanganese ¹	Silicomanganese ¹	Manganese metal ^{2, 3}
	(dollars per gross ton)	(cents per pound)	(cents per pound)	(cents per pound)
November 3	560.00-570.00	46.00-54.00	36.00-38.00	82.00-85.00
November 1	0 572.00-590.00	46.00-54.00	36.00-38.00	82.00-85.00
November 1	7 625.00-650.00	44.00-48.00	36.00-38.00	82.00-85.00
November 2	4 535.00-655.00	44.00-48.00	33.00-36.00	82.00-85.00

Ore Prices, dollars per metric ton unit, manganese content⁴

	44% Manganese Ore ²	48% Manganese Ore ²
November 3	1.85-1.95	2.30-2.50
November 10	1.85-1.95	2.30-2.50
November 17	1.85-1.95	2.30-2.50
November 24	1.85-1.95	2.30-2.50

¹Source: Platts Metals Week, dealer import price.

²Source: Ryan's Notes, North American transaction price.

³Electrolytic manganese metal.

⁴To determine dollars per metric ton, multiply the manganese content percentage by the price.

 $\label{eq:table 1} \textbf{TABLE 1}$ SELECTED U.S. FOREIGN TRADE IN MANGANESE 1

(Metric tons, manganese content)²

	Impor	ts for consumpti	on		Exports	
	Ore and	Ferroalloy			Ferroalloy	
	dioxide	and metal	Total	Ore	and metal	Total
2004:						
October	35,200	59,700	95,000	7,140	776	7,920
January-October	206,000	497,000 ^r	703,000 ^r	39,900	7,060	46,900
2005:						
January	7,650	45,000	52,600	162	955	1,120
February	40,700	29,000	69,700	111	1,170	1,280
March	22,300	42,000	64,300	206	1,160	1,360
April	38,400	39,900	78,300	2,350	778	3,130
May	16,500	47,400	64,000	364	1,380	1,740
June	19,500	41,000	60,500	272	1,550	1,820
July	21,000	40,000	61,000	197	934	1,130
August	23,800	25,400	49,100	234	1,360	1,600
September	41,800	31,700	73,600	564	909 ^r	1,470
October	41,000	40,200	81,200	480	1,330	1,810
Total	273,000	382,000	654,000	4,950	11,500	16,500

rRevised.

Source: U.S. Census Bureau.

 ${\it TABLE~2} \\ {\it U.S.~IMPORTS~FOR~CONSUMPTION~OF~SILICOMANGANESE~IN~OCTOBER~2005}^1$

(Metric tons)

					Year to date	
	Gross	Mn	Customs	Gross	Mn	Customs
Source	weight	content	value ²	weight	content	value ²
Argentina	88	58	\$64,000	88	58	\$64,000
Australia	2,310	1,520	1,190,000	28,600	19,000	16,700,000
Canada	20	12	19,700	370	323	215,000
France				2	1	2,860
Georgia	5,000	3,750 ³	2,620,000	11,500	8,690	6,910,000
Kazakhstan				20	13	17,500
Korea, Republic of				216	156	305,000
Mexico				18,200	12,100	13,100,000
Norway	282	169 ³	286,000	49,000	30,900	48,600,000
Romania				57,100	38,300	41,700,000
Russia				11,400	7,750	9,250,000
South Africa	21,200	13,900	11,900,000	91,900	60,700	56,100,000
Spain				4,000	2,670	2,770,000
Total	28,800	19,400	16,100,000	272,000	181,000	196,000,000

⁻⁻ Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²As reported except as estimated for imports of manganese dioxide and manganese waste and scrap and for exports from gross weights.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Customs value generally represents a value in the foreign country and therefore excludes U.S. import duties, freight, insurance, and other charges incurred in bringing the material into the United States.

³All or part of these data have been referred to the U.S. Census Bureau for verification.

 ${\bf TABLE~3}$ U.S. IMPORTS FOR CONSUMPTION OF FERROMANGANESE IN OCTOBER ${\bf 2005}^1$

(Metric tons)

					Year to date	e
	Gross	Mn	Customs	Gross	Mn	Customs
Source	weight	content	value ²	weight	content	value ²
Low carbon:						
China	740	678	\$1,190,000	13,900	11,800	\$22,700,000
Japan	1,500	1,210	1,670,000	3,300	2,650	3,830,000
Korea, Republic of	14	11	8,930	1,400	1,050	1,490,000
Mexico	515	413	541,000	6,000	4,810	6,630,000
Netherlands				17	14	29,800
Norway	19	15	16,500	240	197	385,000
South Africa	319	294	569,000	2,300	2,120	4,200,000
Spain				36	28	41,800
Total, low carbon	3,110	2,620	3,990,000	27,200	22,700	39,300,000
Medium carbon, 1%-2% C:						
China				3,150	2,520	4,490,000
Korea, Republic of	4,000	3,200	3,920,000	13,000	10,400	11,300,000
Mexico	252	192^{-3}	322,000	12,300	9,700	12,900,000
Norway				1,810	1,480	2,610,000
South Africa	1,310	1,050	1,060,000	25,000	20,300	28,100,000
Total, m.c., 1%-2% C	5,560	4,450	5,300,000	55,200	44,400	59,400,000
Medium carbon, 2%-4% C:						
South Africa	61	48	30,600	61	48	30,600
Total, m.c., 2%-4% C	61	48	30,600	61	48	30,600
High carbon:						
Australia				4,460	3,420	2,380,000
Brazil				13,800	10,700	9,720,000
Canada				18	13	17,000
China	1,540	1,170	692,000	9,040	6,890	5,940,000
France				4,100	3,200	2,830,000
Hong Kong				3,360	2,550	1,960,000
Mexico				797	623	726,000
Norway				114	92	100,000
Poland				11	9	17,500
South Africa	11,200	8,660	4,570,000	97,700	75,900	55,000,000
Ukraine				2,840	2,230	1,260,000
Total, high carbon	12,700	9,830	5,270,000	136,000	106,000	79,900,000
Grand total	21,400	16,900	14,600,000	219,000	173,000	179,000,000
7						

⁻⁻ Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Customs value generally represents a value in the foreign country and therefore excludes U.S. import duties, freight, insurance, and other charges incurred in bringing the material into the United States.

³All or part of these data have been referred to the U.S. Census Bureau for verification.

TABLE 4 U.S. IMPORTS FOR CONSUMPTION OF MANGANESE ORE (20% OR MORE Mn) IN OCTOBER 2005 $^{1.2}\,$

(Metric tons)

					Year to date	_
	Gross	Mn	Customs	Gross	Mn	Customs
Source	weight	content	value ³	weight	content	value ³
More than 20%, but less than 47% manganese:						
China				5,140	1,050	\$35,100
Gabon				9,660	8,290	1,180,000
Ghana				18	7	2,340
Mexico				5,870	3,240	675,000
Namibia				26,000	10,400	1,950,000
United Kingdom				87	40	6,000
Total				46,800	23,000	3,850,000
47% or more manganese:						
Australia				22,500	11,800	2,810,000
Belgium	19	13	11,200	133	88	98,600
Brazil				9,000	5,200	1,480,000
China				8,600	4,300	781,000
France				60	56	6,670
Gabon	73,600	38,400	6,590,000	346,000	178,000	28,300,000
Ghana				90	57	4,320
India				85	42	12,800
South Africa				68,000	33,100	7,170,000
Total	73,700	38,400	6,600,000	454,000	233,000	40,700,000
Grand total	73,700	38,400	6,600,000	501,000	256,000	44,500,000

⁻⁻ Zero.

Source: U.S. Census Bureau.

 ${\bf TABLE~5}$ U.S. IMPORTS FOR CONSUMPTION OF MANGANESE DIOXIDE IN OCTOBER 2005^1

(Metric tons, gross weight)

			Year to date	
		Customs		Customs
Source	Quantity	value ²	Quantity	value ²
Australia	3,280	\$4,270,000	15,000	\$19,600,000
Belgium	19	32,700	355	785,000
Brazil	40	20,200	423	454,000
China	811	829,000	8,010	8,410,000
Germany			78	260,000
Japan	290	385,000	3,760	5,180,000
Poland			7	12,000
United Kingdom	1	6,370	1	6,370
Total	4,440	5,540,000	27,600	34,800,000

⁻⁻ Zero.

¹Quantities for general imports and imports for consumption are identical.

²Data are rounded to no more than three significant digits; may not add to totals shown.

³Customs value generally represents a value in the foreign country and therefore excludes U.S. import duties, freight, insurance, and other charges incurred in bringing the material into the United States.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Customs value generally represents a value in the foreign country and therefore excludes U.S. import duties, freight, insurance, and other charges incurred in bringing the material into the United States.

 ${\it TABLE~6}$ U.S. IMPORTS FOR CONSUMPTION OF MANGANESE METAL IN OCTOBER 2005^1

(Metric tons)

			Yea	r to date
	Gross	Customs	Gross	Customs
Source	weight	value ²	weight	value ²
Unwrought flake:				
China	2,340	\$3,560,000	11,600	\$17,400,000
Germany			7	28,200
South Africa	459	871,000	4,880	8,620,000
Total	2,790	4,430,000	16,500	26,000,000
Unwrought powder:				
China	365	521,000	1,260	1,900,000
South Africa	255	513,000	3,210	6,390,000
Total	620	1,030,000	4,480	8,290,000
Unwrought, other:				
China			220	376,000
Germany	73	146,000	2,520	4,820,000
Spain	169	349,000	2,510	6,020,000
South Africa	140	279,000	1,120	2,150,000
Total	382	774,000	6,370	13,400,000
Other manganese, wrought:				
Austria			1	53,300
China			320	523,000
France	1	14,500	23	238,000
Germany			4	42,300
Spain			75	162,000
United Kingdom			2	7,070
Total	1	14,500	424	1,030,000
Grand total	3,800	6,250,000	27,700	48,700,000

⁻⁻ Zero.

Note: Imports for consumption of metallic manganese waste and scrap totaled 80 tons, all of which was from Canada, to give a year-to-date total of 593 tons.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Customs value generally represents a value in the foreign country and therefore excludes U.S. import duties, freight, insurance, and other charges incurred in bringing the material into the United States.

 $TABLE\ 7$ U.S. EXPORTS OF MANGANESE ORE (20% OR MORE Mn), FERROMANGANESE, SILICOMANGANESE, AND MANGANESE METAL BY COUNTRIES OF DESTINATION IN OCTOBER 2005 1

(Metric tons, gross weight)

				anganese,				2	
	Manganese ore			2% or less C		Silicomanganese		Manganese metal ²	
	October	Year to date	October	Year to date	October	Year to date	October	Year to date	
Australia					3	5		7	
Belgium							90	1,000	
Brazil						11	1	20	
Canada	167	2,780	587	7,940	20	300	1	242	
Chile		4		1				5	
China	793	6,370							
Colombia		6					3	3	
Denmark		17							
El Salvador								13	
France						101	1	1	
Germany		137					16	292	
Hong Kong				7			(3)	3	
Indonesia		39				22	2	8	
Israel		4							
Italy					33	33		4	
Japan							18	438	
Korea, Republic of		34						27	
Kuwait		83							
Mexico		101		684	17	336	2	182	
Netherlands				2		22			
New Zealand	1	2							
Peru								5	
Poland		193							
Russia		21							
Singapore		1							
Spain						8		10	
Sweden		94						95	
Taiwan								(3)	
Trinidad and Tobago							2	3	
United Kingdom								1	
Venezuela								4	
Total	961	9,890	587	8,630	73	838	136	2,360	

⁻⁻ Zero.

Note: Exports of ferromanganese with more than 2% carbon totaled 857 tons, of which 151 tons went to Canada and 706 tons went to Mexico, to give a year-to-date total of $2,260^4$ tons.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes manganese-aluminum, some other alloys, and waste and scrap.

³Less than 1/2 unit.

⁴Includes revisions to previous months' data

7

 ${\bf TABLE~8}$ U.S. FOREIGN TRADE IN SELECTED MANGANESE CHEMICALS IN OCTOBER 2005, BY CLASS 1

					Year to date			
			Principal sources and destinations:			Principal sources and destinations:		
	Gross weight	Value ²	gross weight (metric tons);	Gross weight	Value ²	gross weight (metric tons);		
Class	(metric tons)	(thousands)	value ² (thousands)	(metric tons)	(thousands)	value ² (thousands)		
Imports for consumption:								
Manganese oxides other than dioxide	245	\$197	Mexico 173; \$77	4,033	\$2,622	Mexico 2,060; \$857		
Manganites, manganates, and								
other permanganates				38	123	Germany 38; \$123		
Potassium permanganate	92	190	Czech Republic 42; \$91	840	1,755	Czech Republic 501; \$1,070		
Sodium permanganate ³	15	8	China 15; \$8	285	657	Germany 135; \$476		
Sulfates, basket category,								
including manganese sulfate	3,620	1,940	Mexico 1,720; \$876	37,315	21,782	Mexico 19,235; \$10,000		
Exports:								
Manganese dioxide	488	518	Canada 185; \$128	4,841	4,073	Canada 2,800; \$1,310		
Manganese oxides other than dioxide	2,720	1,030	Canada 2,420; \$826	11,498	6,929	Canada 8,770; \$3,140		
Manganites, manganates, and								
other permanganates	6	16	Canada 6; \$13	83	198	Canada 41; \$91		
Potassium permanganate	254	546	Canada 80; \$177	3,144	6,644	Spain 1,340; \$2,560		
Sodium permanganate ³	61	140	Japan 41; \$102	530	1,455	Japan 332; \$906		
Sulfates, basket category,								
including manganese sulfate	1,740	1,040	Canada 1,580; \$705	19,432	12,876	Canada 16,500; \$7,150		

⁻⁻ Zero.

¹Data are rounded to no more than three significant digits.

²For imports, Customs value; for exports, free alongside ship value.

³In December 2004, the U.S. Harmonized Tariff Schedule was changed for manganites, manganates and permanganets to implement the United States-Australia Free Trade Agreement. Starting in 2005, sodium permanganate is tracked separately from the "manganites, manganates, and other permanganates" trade category.